

CLAIMS

I claim:

1 1. An apparatus for repairing irregularities in a chimney
2 flue liner, comprising:

3 an applicator formed of a resilient foam material, and
4 having a geometrically solid configuration with an upper end and
5 a lower end opposite said upper end; and

6 a lifting line attached to the upper end of said applicator
7 for drawing said applicator through the chimney flue liner and
8 distributing a mortar material therein.

1 2. The chimney flue liner repair apparatus according to
2 claim 1, further including a draw down line extending from the
3 lower end of said applicator.

1 3. The chimney flue liner repair apparatus according to
2 claim 1, further including an electrically powered vibrator
3 disposed within said applicator for tamping the mortar material
4 firmly into the irregularities within the flue liner.

1 4. The chimney flue liner repair apparatus according to
2 claim 3, further including:

3 a rigid housing surrounding and containing said vibrator,
4 said applicator substantially surrounding and encasing said
5 housing, said lifting line being connected to said housing.

1 5. The chimney flue liner repair apparatus according to
2 claim 4, further including a draw down line connected to said
3 housing and depending therefrom.

1 6. The chimney flue liner repair apparatus according to
2 claim 1, further including an elastomer coating disposed over
3 said applicator.

1 7. The chimney flue liner repair apparatus according to
2 claim 1, further including a lifting line winch disposed above
3 said applicator and communicating therewith by said lifting line.

1 8. A method of repairing a flue liner in a chimney using
2 the apparatus of claim 1, comprising the steps of:

3 (a) positioning the applicator at the base of the chimney
4 flue liner to be repaired;

5 (b) pouring liquid mortar material down the chimney flue,
6 onto the upper end of the applicator;

7 (c) distributing the liquid mortar against the flue liner
8 by drawing the applicator upwardly through the chimney flue liner;
9 and

10 (d) forcing the liquid mortar into any irregularities in
11 the chimney flue as the applicator closely passes interior walls
12 of the chimney flue liner.

1 9. A method of repairing a flue liner in a chimney,
2 comprising the steps of:

3 (a) forming an applicator of a resilient foam material
4 having a geometrically solid configuration with an upper end and a
5 lower end opposite said upper end;

6 (b) providing a lifting line attached to the upper end of
7 the applicator;

8 (c) positioning the applicator at the base of the chimney
9 flue liner to be repaired;

10 (d) pouring liquid mortar material down the chimney flue,
11 onto the upper end of the applicator;

12 (e) distributing the liquid mortar against the flue liner by
13 drawing the applicator upwardly through the chimney flue liner;
14 and

15 (f) forcing the liquid mortar into any irregularities in the
16 chimney flue, as the applicator closely passes interior walls of
17 the chimney flue liner.

1 10. The method of repairing a flue liner in a chimney
2 according to claim 9, further including the steps of:

3 (a) providing a draw down line extending from the lower end
4 of the applicator; and

5 (b) drawing the applicator down the chimney flue, prior to
6 pouring the mortar onto the applicator and lifting the applicator
7 up the chimney flue liner.

1 11. The method of repairing a flue liner in a chimney
2 according to claim 9, further including the steps of:

3 (a) installing an electrically powered vibrator within the
4 applicator; and

5 (b) tamping the mortar material firmly into the
6 irregularities within the flue liner by operating the vibrator.

1 12. The method of repairing a flue liner in a chimney
2 according to claim 9, further including the steps of:

3 (a) encasing the vibrator within a housing;

4 (b) enclosing the housing substantially within the
5 applicator;

6 (c) attaching the lifting line to the housing of the
7 vibrator;

8 (d) providing a draw down line for the applicator; and

9 (e) attaching the draw down line to the housing of the
10 vibrator, opposite the lifting line.

1 13. The method of repairing a flue liner in a chimney
2 according to claim 9, further including the step of applying an
3 elastomer coating over the applicator.

1 14. The method of repairing a flue liner in a chimney
2 according to claim 9, further including the steps of:

3 (a) providing a lifting line winch at the upper end of the
4 chimney flue liner;

5 (b) attaching the lifting line to the winch; and

6 (c) drawing the applicator upwardly through the chimney flue
7 by operating the winch and winding the lifting line thereon.

1 15. The method of repairing a flue liner in a chimney
2 according to claim 14, further including the steps of:

3 (a) providing a draw down line extending from the lower end
4 of the applicator; and

5 (b) drawing the applicator down the chimney flue, prior to
6 pouring the mortar onto the applicator and lifting the applicator
7 up the chimney flue liner.

1 16. The method of repairing a flue liner in a chimney
2 according to claim 14, further including the steps of:

3 (a) installing an electrically powered vibrator within the
4 applicator; and

5 (b) tamping the mortar material firmly into the
6 irregularities within the flue liner by operating the vibrator.

1 17. The method of repairing a flue liner in a chimney
2 according to claim 14, further including the steps of:

3 (a) encasing the vibrator within a housing;

4 (b) enclosing the housing substantially within the
5 applicator;

6 (c) attaching the lifting line to the housing of the
7 vibrator;

8 (d) providing a draw down line for the applicator; and

9 (e) attaching the draw down line to the housing of the
10 vibrator, opposite the lifting line.

1 18. The method of repairing a flue liner in a chimney
2 according to claim 14, further including the step of applying an
3 elastomer coating over the applicator.

1 19. The method of repairing a flue liner in a chimney
2 according to claim 14, further including the steps of:

3 (a) providing a lifting line winch at the upper end of the
4 chimney flue liner;

5 (b) attaching the lifting line to the winch; and

6 (c) drawing the applicator upwardly through the chimney flue
7 by operating the winch and winding the lifting line thereon.